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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/548,319	09/07/2005	Hans-Joachim Limburg	LIMB3003/JEK	6125

23364 7590 08/09/2007  
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EXAMINER
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GALL, LLOYD A

ART UNIT	PAPER NUMBER
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3676

MAIL DATE	DELIVERY MODE
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08/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/548,319	LIMBURG, HANS-JOACHIM	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lloyd A. Gall	3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/7/2006</u> | 6) <input type="checkbox"/> Other: ____  |

### DETAILED ACTION

The disclosure is objected to because of the following informalities: Throughout the Abstract, the term "means" should not be used.

Appropriate correction is required.

Claims 1-3 and 6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/548,321 in view of Sato (009). Claims 1-13 of the (321) application teach all of the limitations of the instant (319) application except for the control member disk cooperating on a first side with the bolt and on the second side with the position detector. Sato teaches a control member disk 21 cooperating on its first side at 29, 31, 32 with the bolt and on its second side cooperating with the position detector 34, 35, 36 as seen in figs. 1 and 4. It would have been obvious to use the control member disk of the (321) claims on its first side with the locking bolt and on its second side with the position detector, in view of the teaching of Sato, the motivation being to provide a compact lock assembly.

This is a provisional obviousness-type double patenting rejection.

Claim 4 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/548,321 in view of Sato, and further in view of Suzuki (848). Suzuki teaches in fig. 10, a worm 39 shaft 38a being parallel to the lock bolt 32. It would have been obvious

to modify the device of claims 1-13 of the (321) application such that the worm shaft is parallel to the locking bolt, in view of the teaching of Suzuki, the motivation being to provide a compact assembly.

This is a provisional obviousness-type double patenting rejection.

Claim 5 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/548,321 in view of Sato in view of Kueng (762) or Bauermeister (186). Kueng, in fig. 11, teaches a spiral groove/rib 55 to control movement of the locking bolt 2.

Bauermeister teaches a spiral groove 16a in fig. 3 to control movement of the locking bolt 14. It would have been obvious to modify the control disk of the (321) application claims to include a spiral groove/rib to move the locking bolt, in view of the teaching of Kueng or Bauermeister, the motivation being to prevent unwanted free play movement of the locking bolt.

This is a provisional obviousness-type double patenting rejection.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Zillman (058)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

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the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Zillman teaches a device for locking recesses 12 of a steering shaft, including a locking bolt 4, an electric motor 34, a control disk 35 rotated back and forth by the motor, wherein the disk 35 cooperates with the locking bolt 4 on its first (underlying as seen in fig. 2) side and with a rotary position detector 59 on the second upper side of the disk as seen in fig. 2. The disk 35 has teeth 38 as seen in fig. 4 to cooperate with a worm 40. The second upper side of the disk 35 has a spiral groove 47 which also cooperates with the detector 59.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (009) in view of Haldric et al (145).

Sato teaches a steering shaft 10 locked by a locking bolt 18, including a motor 22 actuated circular control disk 21 cooperating on its first side 29, 31, 32 with the locking bolt and on its second side at 34, 35, 36 with a rotary position detector 34, 35. The locking bolt is displaceable radially with respect to the axis of rotation of the disk 21. Haldric teaches a shaft having plural recesses 212 in fig. 3C to receive a locking bolt 12. It would have been obvious to modify the steering shaft of Sato to include plural

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recesses, in view of the teaching of Haldric et al, the motivation being to allow the steering wheel to be locked at plural rotational positions, as is well known.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dimig et al (587) in view of Haldric et al and Sato.

Dimig teaches a steering shaft locked by a locking bolt 14, an electric motor 18, worm 34 and circular control disk with teeth 30, the disk cooperating with the locking bolt on the first side of the disk with its cam portion 32. The bolt 14 also sides radially relative to the axis of rotation of the disk. Haldric teaches plural steering shaft recesses 212, as set forth above. Sato teaches a circular disk 21 cooperating with the locking bolt on its first side 29, 31, 32 and cooperating with a position detector at 34, 35, 36 on the second side of the disk 21. It would have been obvious to modify the steering shaft of Dimig to include plural recesses, in view of the teaching of Haldric et al, the motivation being to allow the steering wheel to be locked in plural rotational positions, as is well known. It would have been obvious to use the second side of the disk of Dimig to cooperate with a rotational position detector, in view of the teaching of Sato, the motivation being to ensure that the disk is motor actuated only through its desired positions of rotation.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dimig et al in view of Haldric et al and Sato as applied to claim 2 above, and further in view of Suzuki (763).

Suzuki teaches in fig. 10, a worm 39 shaft 38a being parallel to the lock bolt 32. It would have been obvious to modify the device of Dimig et al such that the worm shaft

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is parallel to the locking bolt, in view of the teaching of Suzuki, the motivation being to provide a compact assembly.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dimig et al in view of Haldric et al and Sato as applied to claim 3 above, and further in view of Kueng or Bauermeister.

Kueng, in fig. 11, teaches a spiral groove/rib 55 to control movement of the locking bolt 2. Bauermeister teaches a spiral groove 16a in fig. 3 to control movement of the locking bolt 14. It would have been obvious to modify the control disk of Dimig et al to include a spiral groove/rib to move the locking bolt, in view of the teaching of Kueng or Bauermeister, the motivation being to prevent unwanted free play movement of the locking bolt.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

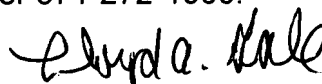
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 571-272-7056. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Lloyd A. Gall  
Primary Examiner  
Art Unit 3676

LG LG  
July 31, 2007